JESSIE LAKE WATERSHED ASSOCIATION JESSIE JABBER

VOL. 2, NO. 2.

FALL 1999

GREETINGS FROM PRESIDENT HAROLD GOETZMAN:

As you can tell by this letter, I was elected at the Fall Meeting to continue as President of the Jessie Lake Watershed Association (JLWA). In addition, the other officers have been reelected for another term and we have two new Board members. You can read a little about them in this newsletter, but I am pleased to note that one is a resort owner and the other is a resident of Peterson Lake. We need this kind of diversity to maintain our awareness of the total watershed needs.

Speaking of diversity, as I look back at last year's activities, I think we were successful at expanding the areas of interest and a large number of volunteer hours were spent on a variety of activities. More than 800 hours were put in on walleye monitoring, stream maintenance, placement of spawning rock, checking on beaver, shoreline restoration, measuring and sampling stream flows, lake water sampling, hanging wood duck houses, loon watch, attending meetings and preparing newsletters. Providing more than 40 wood duck houses to members attending the Spring and Fall meetings was a big step for getting into wildlife projects. A successful association can build and grow on the diversity of its members and that is why I am pleased we have continued to grow to 70 members, so encourage your neighbors to join also. We can all be proud that this high level of activity has earned our association an award from the Itasca County Soil and Water Conservation District (ICSWCD) as Cooperator of the Year for 1999.

As we move into the coming year, most of these activities will continue to be active projects since our Department of Natural Resources (DNR) grant covers two years and again will require many volunteer hours. We look forward to your participation. There is also a good chance that the water quality study will be expanded as we have been asked to participate in applying for a two-year Minnesota Pollution Control Agency (MPCA) grant that would be managed by the ICSWCD. The project titled "A Case Study for Water Quality of a Polymictic Lake" would serve to help understand the role of development on the natural degradation for lakes of this type in Itasca County. (The term polymictic refers to lakes that frequently turn over during the summer rather than just in the spring and fall.) This project would again include the cooperation of the ICSWCD, DNR, and U.S. Forest Service (USFS). In addition, it would include staff from the MPCA, USFS Experimental Forest Research Station, and the University of Minnesota Hydrology Dept. at St. Anthony Falls. Based on the last two years of water quality data for Jessie Lake, it is apparent there is a severe fluctuation in nutrient levels (phosphorus) and resulting algae blooms. These swings in phosphorus loading not only affect the lake seasonally (recreation and fishery potential), but are also detrimental to the longterm health of the lake. If approved, this project will bring more than \$150,000 of research into the Jessie Lake Watershed.

This year we experienced record water levels throughout the watershed. These high levels made us all aware of the effects of shoreline erosion and the need for that buffer zone. Hopefully, our demonstration projects on shoreline restoration will provide us all with useful information.

As we enter the winter season, let's all think about how we as stewards of the environment can do our part to improve the Jessie Lake Watershed. May you all have a great holiday season and a prosperous New Year.

ANNUAL MEETING

by Neil Gustafson

Vice President Jim Anderson welcomed 45 members and guests to the JLWA Second Annual Meeting on Saturday, September 4 at the Bowstring Town Hall. He reported that of the 130 households in the area 68 were paid members, an increase of 12 over last year. Jim reviewed the Association's activities and progress in monitoring and maintaining water quality and wildlife habitats in collaboration with the DNR, ICSWCD, USFS, and the MPCA.

Water levels at four stream sites and one site on Jessie Lake were monitored weekly between May and October 1999. Water samples for chemical analyses were obtained bimonthly from the streams and Jessie Lake while Peterson Lake was sampled monthly. A report on the results is expected from the ICSWCD early next year, which will help determine if action is advisable.

In the past year water levels in Jessie Lake have fluctuated nearly four feet, from the lowest recorded level of 1323.3-feet above sea level in August I998 to the highest recorded level of 1327.01 following the storms in early July. This water level was about 14-inches higher than the previously recorded high and 7-inches higher than the estimated highest level ever attained. Throughout the rest of the summer the water level declined about one foot, but was still above the "ordinary high water level" of 1325.4 established by the Minnesota Division of Waters. The resulting changes in shoreline and water depth have inconvenienced property owners along lakes and streams.

On June 10th JLWA volunteers and DNR personnel installed a second walleye spawning bed in Spring Creek downstream from the successful bed installed last year. The DNR carried out a test netting program on Jessie Lake this summer to monitor fish populations; good walleye yields have been reported. Test netting was also done on Spring and Little Spring lakes this past summer.

To help stabilize lakeshore and reduce runoff from lakeside lawns, a shoreline planting demonstration project was undertaken on August 17 on the Nelsons' property using native plant materials taken from the highway 169 right of way reconstruction south of Grand Rapids; two more planting projects remain to be completed. Watershed area residents are invited to check out the Nelson plantings and to participate in the future. A separate landscaping demonstration project includes Jessie Lake Resort as one of four sites in Itasca County that have been approved by the DNR. These are scheduled for next year.

Stream maintenance to enhance walleye spawning habitat has focused on Spring Creek between Little Spring Lake and Jessie Lake. Clearing of the stream channel between Spring and Little Spring lakes has not yet been undertaken. Jim Anderson asked for volunteers to help with this effort and about a dozen persons signed up. In addition to stream debris, beaver dams on Spring Creek have prevented normal walleye spawning. Dams have been demolished by the DNR and eight beavers were trapped last spring to discourage their reconstruction. Additional trapping is scheduled for this fall but DNR funding will end after this year with responsibility for beaver trapping in subsequent years passed on to JLWA.

As a result of these efforts of working together, the ICSWCD named the Jessie Lake Watershed Association as their "Cooperator of the Year."

Jim Anderson reported seeing two pairs of nesting loons on Jessie Lake this summer that produced three young ones. In addition, 15 more duck houses were obtained from Ducks Unlimited. After the meeting John Lichtscheidl passed them out with installation instructions, wood shavings and lag bolts.

Ken and Ardis Albin have sold their house on Jessie Lake and will be leaving. This opens a one-year vacancy on the JLWA Board to fill Ken's term. Jim asked for interested volunteers who would be willing to serve, suggesting that it would be good to have a woman on the Board. Ken offered his Secchi Disc to anyone who would monitor water clarity and report the results.

Several boaters have reported the remains of an old railroad trestle at the south end of Jessie Lake, which poses a navigation hazard, especially at low water, with structural members lying just below the surface. If the Association will provide the markers, the Itasca County Sheriff's Department has agreed to accept responsibility for installing/removing the markers each boating season. Next year an underwater camera will be used to precisely locate and identify the material.

No Eurasian watermilfoil has been reported on any lake in our watershed area. However, milfoil has been reported *on* Ice and McKinney lakes in Grand Rapids. Watershed residents were urged to pick up a brochure on milfoil on the front table to help them identify this invasive plant and report any sightings immediately to the DNR or the County Sheriffs' Office.

The nominating committee proposed that President Harold Goetzman, Vice President Jim Anderson, Secretary Bill Nelson, and Treasurer Neil Gustafson continue as officers for another year, that Ed Bick presently serving a one year tern on the Board of Directors, be reelected for a two-year term, and that Tim Onraet be elected to a one year Board term filling the expired term of Lance Stradtmann. The officers and board members proposed by the nominating committee were elected by voice note without dissent. (Subsequently, Gloria Dallas was appointed by the Board of Directors to fill the remaining one-year position vacated by the resignation of Ken Albin.)

There was no objection to adjourning the meeting after the discussion of JLWA activities and election as the aroma of homemade cuisine filled the room. All enjoyed the delicious lunch and the companionship of neighbors.

MEET YOUR NEW DIRECTORS

<u>Gloria Dallas</u> Gloria was born in St. Paul and grew up in Minneapolis where she graduated from Roosevelt High School. After graduating from the Minnesota School of Business she worked for the Maytag Corporation and took business classes at the University of Minnesota. In 1967, Gloria moved to Los Angeles and worked for U. S. Motors. Gloria met Frank Dallas, recently widowed, and after their marriage they decided to return to Minnesota. In 1971 Gloria and Frank built a cabin on Peterson Lake where in 1976 they moved permanently. Gloria worked for North Itasca Electric, retiring in 1992. They have three children, Lisa, Neil, and Tanya. Gloria stays very busy volunteering her time to a variety of local civic and church organizations.

<u>*Tim Onraet*</u> Tim Onraet was born and raised in Hermantown, MN. and attended Hermantown schools. After graduation, he attended Itasca Community College where he met his wife, Rita.

Rita Onraet (nee Paatela) is a native of Grand Rapids, MN and graduated from Grand Rapids High School and Itasca Community College. Tim continued his education at Anoka Community College and Rita continued at Mankato State University. After college, both lived and worked in the Twin Cities, most recently owning a home in Champlin, MN for six years. They were married in 1993. The Onraets purchased Ayers Resort Park and Campground on Jessie Lake in June and changed the name to Jessie View Resort and RV Campground. They have a daughter Carly, age 2 1/2 and two dogs, Maggie and Jess. Their hobbies include golf, softball, fishing, and travel, (none of which they have time for now!) and they really enjoy living in the Jessie Lake area.

SEPTIC SYSTEMS

By Bill Nelson

During a recent meeting of the Technical Advisory Committee a discussion developed about the amount of phosphorus in our lakes. Other than from a point-source, phosphorus primarily enters lakes in three ways; runoff from the land, in rainwater and from septic tanks. If it ever became advisable to reduce the amount of phosphorus entering a lake the only one of these sources, which can be controlled, is that arriving from septic tanks. Since my knowledge of septic systems was limited to the need to occasionally pump them out, I obtained the following information in a publication of the University of Minnesota Extension Service, a "Septic Systems Owner's Guide."

<u>Stewardship</u>

When your septic system is properly designed, installed, operated, and maintained it will provide economical and effective sewage treatment. If you properly treat sewage today, future generations will not incur the costs of cleaning up the health or environmental problems that may have otherwise been created.

Many things people do influence the quality of ground and surface water resources. One of the impacts we have on the quality of our waters is the sewage that we all produce. Proper handling and treatment of sewage will protect our waters, and ourselves, from contamination.

Treating sewage is everyone's responsibility. Residents of towns and cities have their sewage treated at a municipal treatment plant. Costs are covered by taxes, assessments, and direct charges. Residents of areas without access to municipal treatment plants own, operate, and maintain their own "mini-treatment plants" -- their septic systems. A septic system may be referred to as an "on-site sewage treatment system," "individual sewage treatment system," or "wastewater treatment system."

Why You Need Good Wastewater Treatment

The septic system is designed to treat wastewater for a specific site. Proper treatment of wastewater reduces health risks to humans and animals and prevents surface and groundwater contamination.

Risks to Human and Animal Health

It is unhealthy for humans, pets, and wildlife to drink or come in contact with surface or ground water contaminated with wastewater. Inadequate treatment of wastewater allows bacteria, viruses, and other disease causing pathogens to enter groundwater and surface water. Hepatitis, dysentery, and other diseases may result from bacteria and viruses in drinking water. Disease causing organisms may make lakes or streams unsafe for recreation. Flies and mosquitoes that are attracted to and breed in wet areas where wastewater reaches the surface may also spread disease.

Inadequate treatment of wastewater can raise the nitrate levels in groundwater. High concentrations of nitrate in drinking water are a special risk to infants. Nitrate affects the ability of an infant's blood to carry oxygen, a condition called methemoglobinemia (blue-baby syndrome).

Risk of Contaminating Water

A septic system that fails to treat sewage can also allow excess nutrients to reach nearby lakes and streams promoting algae and weed growth. Algal blooms and abundant weeds may make the lake unpleasant for swimming and boating, and can affect water quality for fish and wildlife habitat. As plants die, settle to the bottom, and decompose, they use oxygen that fish need to survive.

Many synthetic cleaning products and other chemicals used in the house can be toxic to humans, pets, and wildlife. If allowed to enter a failing septic system, these products may reach groundwater, nearby surface water, or the ground surface.

In the soil treatment portion of the septic system (drain field or mound), bacteria and viruses in the sewage are destroyed by the soil and naturally-occurring microscopic organisms. Nutrients are absorbed by soil particles or taken up by plants. However, these processes only work in soil that has air in it. The soil cannot be saturated with water. Near lakes, streams, and wetlands, soil conditions may be saturated. When the soil is saturated, biological breakdown will be incomplete and nutrients will move much greater distances, sometimes hundreds of feet from the drainfield or mound, and possibly into surface water. **Even systems that appear to be working well or that are in compliance with local design and installation codes may allow nutrients or bacteria to reach the ground or surface water.**

SAMPLING THE DIVERSITY OF SPRING CREEK FISHES

By Chantel Cook, Forest Fisheries Biologist, U.S. Forest Service

On August 25, 1998, Karl Koller, DNR fisheries biologist, two DNR and USFS technicians, and I sampled fish in Spring Creek downstream of the County Road 135 bridge. We collected the fish by electrofishing, identified and counted the species, then returned them to the water. The purpose of this sampling was to determine the "health" of the stream by determining the diversity of fish and applying an Index of Biotic Integrity.

The Index of Biotic Integrity (IBI) was developed as a result of the Clean Water Act (CWA) of 1977. A fundamental aim of the CWA legislation was to maintain or restore the biological integrity of the nation's surface waters. The CWA, however, did not specify how states were to monitor, or measure biological integrity. In 1987, Dr. Jim Karr found that the presence and abundance of stream fishes were linked to the physical and chemical characteristics of a stream. He developed an index based on fish community attributes that reflect basic structural and functional characteristics of the community and called it an Index of Biotic Integrity. Through the use of the IBI, the "health" of streams could successfully be measured. Twelve measures, or metrics, make up the index, and each is scored by comparing the values observed in each stream to those expected from unimpacted streams. The values from each category of metrics are then summed to calculate an overall stream score. The twelve measures include the total number of native species, number of darter, sucker and sunfish species, number of species 'intolerant' of environmental degradation, percent of individuals that are species 'tolerant' of environmental degradation, percent omnivores (fish that eat anything), insectivores (fish that eat insects), and piscivores (fish that eat other fish), percent lithophilous spawners (fish that spawn on gravel or sand), number of individuals (excluding 'intolerant' species) per 300 meters of stream, and the percent of individual fish with deformities or tumors.

Because there is no IBI developed specifically for the Upper Mississippi or Bigfork River watersheds, we used the IBI developed for northern Wisconsin streams by John Lyons to assess 25 streams on the Chippewa National Forest in August 1998, and September 1999. Streams with total

scores of 65 to 100 are considered of excellent quality with minimal human disturbance. These streams should contain regionally expected fish species, including species intolerant of environmental degradation, and a balanced trophic structure. Streams with totals of 50 to 64 are classified as being of good quality. They are characterized by species diversity somewhat below expected levels and some species, especially piscivores, present in less than optimal abundance or size/age distributions. Scores of 30 to 49 reflect a stream in fair condition, and streams with scores of 20 to 29 are considered poor quality.

We collected in Spring Creek 329 fish represented by the following 15 species (number in parentheses): Finescale Dace (82), Johnny Darter (10), Fathead Minnow (19), Central Mudminnow (44), Iowa Darter (3), Pumpkinseed, (1), Northern Redbelly Dace (54), White Sucker (1), Burbot (4), Mottled Sculpin (3), Common Shiner (19), Rock Bass (1), Blacknose Shiner (34), Yellow Perch (51), and Largemouth Bass (3). This resulted in an IBI score of 65, which indicates that the overall biological community should be in excellent condition. Only three of the twenty-five streams that we have sampled in the Chippewa National Forest had higher scores than did Spring Creek. While we continue to manage Spring Creek for walleye spawning habitat, we must be cautious about making too many structural changes in the stream, which may degrade habitats for other species. Habitat degradation will result in a loss of fish diversity and a decline of the biological integrity or "health" of the stream.

THE EXOTICS HAVE ARRIVED

By Harold Goetzman

In October the DNR confirmed the presence of Eurasian watermilfoil in Gilbert Pit, a 222-acre recreational lake in the town of Gilbert in St. Louis Co. It was found scattered in many areas even though the former iron-ore pit has very little total area where milfoil can grow. It appears the lake has been infested for some time. According to the DNR this is the farthest north that milfoil has been found. Also, in June of this year the aquatic plant was found in McKinney Lake and the connecting Ice Lake near Grand Rapids, which was reported then to be the farthest north discovery. A few years ago it had been found about 40 miles south of here and these new locations were rather surprising to everyone. This invasive exotic plant is difficult to control and can take over the natural weed growth producing large floating mats. A total lake treatment with the application of the chemical herbicide Sonar has been used by the DNR in the 124-acre McKinney Lake to stop the spreading to other lakes.

If you identify Eurasian watermilfoil in any of the lakes in the Jessie Lake Watershed, it should be reported to the DNR. There is another aquatic plant called Northern watermilfoil which looks very similar and can be found in most area lakes; the different identifying characteristics are pointed out in an informational card handed out at our JLWA meetings. The DNR is also reminding boaters to remove all aquatic plants from your boat trailers (and props) and to drain the water from your boats live wells before leaving a lake public access area. This is particularly important when leaving the lakes in southern Minnesota that are known to have Eurasian watermilfoil.

LAKESCAPING RESTORES NATIVE SPECIES AND BEAUTY TO SHORELAND

By Harold Goetzman

Across the Northland, waterfront property is being developed at record rates as people move to lakes and rivers for peace and quiet, clean air and water, fishing and wildlife viewing. Yet that development is threatening the very things that attracted people in the first place. We all want good water quality, good wildlife habitat and scenic beauty, but all the little modifications that lake owners make add up to large-scale habitat loss or end up detracting from why we wanted to live there.

To minimize the impact, an increasing number of waterfront property owners are becoming interested in "lakescaping," the practice of using shoreline buffer strips of native plants to create wildlife habitats and prevent runoff and erosion into the water. After a five-year collaborative effort, the new DNR publication "Lakescaping for Wildlife and Water Quality" is now available. This book written by Carrol Henderson (wildlife program supervisor), Carolyn Dindorf (soil and water conservationist), and Fred Rozumalski (landscape architect) provides alternatives to lakeshore owners for landscaping on shoreland property. Henderson said, "Loons, herons, eagles, and many aquatic species rely heavily on the band of land that stretches 50 feet into the water and 50 feet onto the land. Lakescaping this area for wildlife is a concept whose time has come. Because of the intensive land development pressure in Minnesota to subdivide lakeshore property for home sites, natural undisturbed lakeshore wildlife habitat has become one of the rarest wildlife habitats in Minnesota. Natural shorelines, where the lake meets the land, is home to hundreds of creatures that enrich our lives and provide stability to our ecosystem." Not developing a portion of your lakeshore, or allowing it to return to a natural state, requires little effort compared to regularly mowing and trimming a lawn (time that should be spent fishing). The book presents sound methods for planning and planting a diverse natural lakeshore with techniques to stabilize shoreline, prevent erosion, and restore wildflowers. These skills also apply to landscaping along streams and there are tips for on site preparation and maintenance. Lakeshore rules and regulations for Minnesota are also included.

The JLWA has obtained two copies of the lakescaping book that you may borrow. If you are interested in reading it notify either Jim Anderson or me and we will arrange to get a copy to you. The book is also available at most bookstores for about \$20 and makes a nice gift.

DID YOU KNOW?

By Harold Goetzman

> There is one registered boat in Minnesota for every six residents.

> Purple Loosestrife came from Europe during the 1800"s. It was brought to the USA as a garden perennial and distributed by nurseries as an ornamental wildflower. It has now spread to wetlands across the region and is choking out native plants and destroying wildlife habitats. Efforts to control loosestrife with German beetles that eat the leaves appear to be working.

> The earthworm is not native to this area. The crawlers we use for bait probably arrived in the roots of fruit trees and plants brought by early settlers.

More than twenty-five percent of Minnesota households use septic systems to treat their wastewater. To sell a property, or transfer it to children, requires that the septic system meet current standards. One thought to consider is upgrading your system now.

Pet and animal waste also contains nutrients harmful to the lake. It should be picked up from the yard and disposed of either away from the lake or put into the septic system.

➢ In a day's use, personal watercraft (PWC's) emit the same amount of hydrocarbons and nitrogen oxides into the air as a 1998 passenger car driven 100,000 miles.

Back in 1890 there were only 300,000 deer in the whole country and today there are about 25 million. In addition to changes in logging practices, this increase is largely due to the conservation efforts of sportsmen and women who have provided billions of dollars for habit improvement and wildlife management programs.

Based on water quality data from 1992, Jessie Lake ranked 37th out of 60 lakes tested in Itasca County. However, the water quality data collected in 1998 would move it to 59th place on the same chart. The 1999 data are not available at this time.

Between the opening and closing of fishing seasons, more than two million people will fish in Minnesota. In Minnesota, Wisconsin, and Michigan combined, the fishing related expenditures total more than \$4 billion per year and the sportfishing industry contributes more than \$8 billion to these state economies.

> One pound of phosphorus washed into a lake can produce up to 500 pounds of algae growth and a yard extending to the water's edge will put up to 700 percent more phosphorus into the water than a more natural lakescaped yard.

Jessie Lake was stocked with about 1.8 million walleye fry during the early summer of 1999 by the DNR.

The plastic shotgun shell casings used today remain for many years in the environment before deteriorating. They should be collected and taken back out of the woods when you are hunting.

THE SKY IS FULL OF?

By Harold Goetzman

Did you ever wonder where all those huge swarms of mosquito-like bugs come from every year near the end of August or early September? This year the sky was just black with bugs around dusk and if you were lucky enough to be on the water you might have noticed them almost boiling out of the lake. Those particular insects are called Chironomus Midges and are hatched from the Chironomus larvae that live in the deeper parts of the lake in the bottom sediment. Other midges are also present and throughout the summer you will find periods of high concentrations that swarm in the pine trees, particular the smaller, light-green ones (phantom midges). Other insects that emerge earlier in the summer are hatched from various benthic organisms such as Metriocnemus, Tubifex and Nematode.

These discoveries were made when a number of bottom sediment (benthic) samples were taken a few years ago from Jessie Lake with an Ekman Dredge as part of a Science Fair project by Eric Goetzman to see what was in that mud. The samples were screened to separate the invertebrate or benthic organisms from the sediment and they were then identified and counted. The studies showed that the most prominent invertebrates were the midge larvae, Chironomus, and its close relative Metriocnemus. The Chironomus larvae are an impressive dark red and about 3/4 inch by 1/8 inch in diameter (sometimes called blood worms). Usually the number of Chironomus collected was 55 to $100/\text{ft}^2$ while the total was more than $180/\text{ft}^2$ for the 6 to 8 types found. Other shallower areas of the lake bottom contain different types of organisms like the Mayfly larvae that we have hatch early in June, but these studies concentrated at looking in the sediment from the deepest water. Ultimately, the health of the benthos community tells us something about the nature of the lake. It may mean that big numbers of big bugs makes for big fish.

OUT OF THE CLOSET

By Bill Nelson

It's a traumatic decision but after years of keeping it a secret I have decided to admit the embarrassing truth. I was forced to confront this reality as a teenager but it has taken me until now to summon sufficient courage to finally confess. I am a bird watcher! What is even more unsettling to many folks is that I became a bird watcher because I like to shoot them. My dad was an ardent duck hunter and his passion rubbed off on me at a very early age. Before he would allow me to hunt I not only had to pass his strict safety rules but I also was required to identify everything before shooting. Since it is completely unethical to ever shoot a sitting duck, I had to learn how to identify them on the wing. Identifying ducks so I could hunt them led naturally to try and identify all the other birds I saw.

Living on Jessie Lake in the Chippewa National Forest provides abundant opportunity for me to pursue this hobby. The USFS publishes a booklet (available free of charge at the Marcell or Deer River Ranger Stations) that lists 239 species of birds which have been seen in the area. Because of the diversity of habitats we have, lakes, streams, coniferous and deciduous forests, and farmland, this is about one-third of all the species which occur in the United States.

Many bird watchers will travel anywhere in the country to try and see some exotic species which has been reported on one of the many birding "hot lines." However, I prefer to let the birds come to me. Like most bird watchers I keep lists of all the birds I see during my

travels but the list I have the most fun with is my "Backyard Bird List." In compiling this list you count all the species you see in, and from, your yard. So far I have identified 139 species simply relaxing on my deck, perhaps enjoying a libation while puffing on a stogie. Having bird feeders around certainly attracts many species but mostly it is just living on a lake and having the diversity of habitats that surrounds us.

Birding can be a very inexpensive hobby. Sure you can spend \$1,000 for a pair of binoculars and travel around the world with professional birding guides, but that is hardly required to enjoy watching birds. I use a pair of 8x42 Bushnell binoculars that are excellent and only cost \$100. Coupled with a good field guide, (the National Geographic Field Guide of the Birds of North America is considered the best one), a person is ready to enjoy a delightful hobby. If you should see some unusual species of bird in your yard, give me a call (832-3120). I would love to come and share your enjoyment at hosting a new guest.

MEMBERSHIP

The JLWA presently has 70 paid members. If you have not paid your past dues or would like to pay your upcoming 2000 dues send your \$10 to Neil Gustafson, 47521 Tilly Road, Talmoon, MN 56637.